

Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims

1. (Currently Amended) A display unit of a helmet comprising:

a pair of transparent substrates comprising a resin, each of said transparent substrates having a curved surface; and

a pixel thin film transistor provided over one of said transparent substrates and comprising a source region and a drain region and a channel formation region and a gate electrode, said channel formation region provided between said source region and said drain region, said gate electrode provided adjacent to said channel formation region with a gate insulating film therebetween,

wherein at least said channel formation region contains hydrogen atoms at a density of 4×10^{15} to 1×10^{20} atoms cm^{-3} or lower, and contains carbon and nitrogen atoms at a density of 1×10^{16} to 5×10^{18} atoms cm^{-3} or lower, and contains oxygen atoms at a density of 1×10^{17} to 5×10^{19} atoms cm^{-3} or lower,

wherein said helmet is provided with a shield; and

wherein said display unit is provided over said shield.

2. (Previously Presented) The unit of claim 64 wherein said information comprises a speed.

3. (Original) The unit of claim 1 wherein said helmet is used for an auto-bicycle.

4. (Original) The unit of claim 1 further comprising an active matrix circuit between said transparent substrates.

5-6. (Canceled)

7. (Currently Amended) A display unit of a helmet comprising:

a pair of transparent substrates comprising a tempered glass, each of said transparent substrates having a curved surface; and

a pixel thin film transistor provided over one of said transparent substrates and comprising a source region and a drain region and a channel formation region and a gate electrode, said channel formation region provided between said source region and said drain region, said gate electrode provided adjacent to said channel formation region with a gate insulating film therebetween,

wherein at least said channel formation region contains hydrogen atoms at a density of $\pm 10^{15}$ to 1×10^{20} atoms cm^{-3} or lower, and contains carbon and nitrogen atoms at a density of $\pm 10^{16}$ to 5×10^{18} atoms cm^{-3} or lower, and contains oxygen atoms at a density of $\pm 10^{17}$ to 5×10^{19} atoms cm^{-3} or lower,

wherein said helmet is provided with a shield; and

wherein said display unit is provided over said shield.

8. (Previously Presented) The unit of claim 65 wherein said information comprises a speed.

9. (Original) The unit of claim 7 wherein said helmet is used for an auto-bicycle.

10. (Original) The unit of claim 7 further comprising an active matrix circuit between said transparent substrates.

11-12. (Canceled)

13. (Currently Amended) A display unit of a vehicle comprising:

a pair of transparent substrates comprising a resin, each of said transparent substrates having a curved surface; and

a pixel thin film transistor provided over one of said transparent substrates and comprising a source region and a drain region and a channel formation region and a gate electrode, said channel formation region provided between said source region and said drain region, said gate electrode provided adjacent to said channel formation region with a gate insulating film therebetween,

wherein at least said channel formation region contains hydrogen atoms at a density of 1×10^{20} atoms cm^{-3} or lower, and contains carbon and nitrogen atoms at a density of 1×10^{16} to 5×10^{18} atoms cm^{-3} or lower, and contains oxygen atoms at a density of 1×10^{12} to 5×10^{19} atoms cm^{-3} or lower,

wherein said vehicle is provided with a front glass; and

wherein said display unit is provided over said front glass.

14. (Original) The unit of claim 13 further comprising an active matrix circuit between said transparent substrates.

15-16. (Canceled)

17. (Currently Amended) A display unit of a vehicle comprising:

a pair of transparent substrates comprising a tempered glass, each of said transparent substrates having a curved surface; and

a pixel thin film transistor provided over one of said transparent substrates and comprising a source region and a drain region and a channel formation region and a gate electrode, said channel formation region provided between said source region and said drain region, said gate electrode provided adjacent to said channel formation region with a gate insulating film therebetween,

wherein at least said channel formation region contains hydrogen atoms at a density of 1×10^{20} atoms cm^{-3} or lower, and contains carbon and nitrogen atoms at a density of 1×10^{16} to 5×10^{18} atoms cm^{-3} or lower, and contains oxygen atoms at a density of 1×10^{12} to 5×10^{19} atoms cm^{-3} or lower.

~~4×10^{16} to 5×10^{18} atoms cm^{-3}~~ or lower, and contains oxygen atoms at a density of ~~1×10^{17} to 5×10^{19} atoms cm^{-3}~~ or lower,

wherein said vehicle is provided with a front glass; and

wherein said display unit is provided over said front glass.

18. (Original) The unit of claim 17 further comprising an active matrix circuit between said transparent substrates.

19-20. (Canceled)

21. (Currently Amended) A display unit of an airplane comprising:

a pair of transparent substrates comprising a resin, each of said transparent substrates having a curved surface; and

a pixel thin film transistor provided over one of said transparent substrates and comprising a source region and a drain region and a channel formation region and a gate electrode, said channel formation region provided between said source region and said drain region, said gate electrode provided adjacent to said channel formation region with a gate insulating film therebetween,

wherein at least said channel formation region contains hydrogen atoms at a density of ~~1×10^{14} to 1×10^{20} atoms cm^{-3}~~ or lower, and contains carbon and nitrogen atoms at a density of ~~1×10^{16} to 5×10^{18} atoms cm^{-3}~~ or lower, and contains oxygen atoms at a density of ~~1×10^{17} to 5×10^{19} atoms cm^{-3}~~ or lower,

wherein said airplane is provided with a front glass; and

wherein said display unit is provided over said front glass.

22. (Original) The unit of claim 21 further comprising an active matrix circuit between said transparent substrates.

23-24. (Canceled)

25. (Currently Amended) A display unit of an airplane comprising:

a pair of transparent substrates comprising a tempered glass, each of said transparent substrates having a curved surface; and

a pixel thin film transistor provided over one of said transparent substrates and comprising a source region and a drain region and a channel formation region and a gate electrode, said channel formation region provided between said source region and said drain region, said gate electrode provided adjacent to said channel formation region with a gate insulating film therebetween,

wherein at least said channel formation region contains hydrogen atoms at a density of 4×10^{15} to 1×10^{20} atoms cm^{-3} or lower, and contains carbon and nitrogen atoms at a density of 1×10^{16} to 5×10^{18} atoms cm^{-3} or lower, and contains oxygen atoms at a density of 1×10^{17} to 5×10^{19} atoms cm^{-3} or lower,

wherein said airplane is provided with a front glass; and

wherein said display unit is provided over said front glass.

26. (Original) The unit of claim 25 further comprising an active matrix circuit between said transparent substrates.

27-28. (Canceled)

29. (Currently Amended) A helmet comprising:

a shield;

a pair of transparent substrates comprising a resin provided over said shield, each of said transparent substrates having a curved surface; and

a pixel thin film transistor provided over one of said transparent substrates and comprising a source region and a drain region and a channel formation region and a gate electrode, said channel formation region provided between said source region and said drain

region, said gate electrode provided adjacent to said channel formation region with a gate insulating film therebetween,

wherein at least said channel formation region contains hydrogen and halogen atoms at a density of 1×10^{15} to 1×10^{20} atoms cm^{-3} or lower, and contains carbon and nitrogen atoms at a density of 1×10^{16} to 5×10^{18} atoms cm^{-3} or lower, and contains oxygen atoms at a density of 1×10^{17} to 5×10^{19} atoms cm^{-3} or lower.

30. (Original) The helmet of claim 29 wherein said information comprises a speed.

31. (Original) The helmet of claim 29 wherein said helmet is used for an auto-bicycle.

32. (Original) The helmet of claim 29 further comprising an active matrix circuit between said transparent substrates.

33-34. (Canceled)

35. (Currently Amended) A helmet comprising:

a shield;

a pair of transparent substrates comprising a tempered glass provided over said shield, each of said transparent substrates having a curved surface; and

a pixel thin film transistor provided over one of said transparent substrates and comprising a source region and a drain region and a channel formation region and a gate electrode, said channel formation region provided between said source region and said drain region, said gate electrode provided adjacent to said channel formation region with a gate insulating film therebetween,

wherein at least said channel formation region contains hydrogen and halogen atoms at a density of 1×10^{15} to 1×10^{20} atoms cm^{-3} or lower, and contains carbon and nitrogen atoms at a density of 1×10^{16} to 5×10^{18} atoms cm^{-3} or lower, and contains oxygen atoms at a density of 1×10^{17} to 5×10^{19} atoms cm^{-3} or lower.

36. (Previously Presented) The helmet of claim 71 wherein said information comprises a speed.

37. (Original) The helmet of claim 35 wherein said helmet is used for an auto-bicycle.

38. (Original) The helmet of claim 35 further comprising an active matrix circuit between said transparent substrates.

39-40. (Canceled)

41. (Currently Amended) A vehicle comprising:

a front glass;

a pair of transparent substrates comprising a resin provided over said front glass, each of said transparent substrates having a curved surface; and

a pixel thin film transistor provided over one of said transparent substrates and comprising a source region and a drain region and a channel formation region and a gate electrode, said channel formation region provided between said source region and said drain region, said gate electrode provided adjacent to said channel formation region with a gate insulating film therebetween,

wherein at least said channel formation region contains hydrogen and halogen atoms at a density of 1×10^{20} atoms cm^{-3} or lower, and contains carbon and nitrogen atoms at a density of 5×10^{18} atoms cm^{-3} or lower, and contains oxygen atoms at a density of 5×10^{19} atoms cm^{-3} or lower.

42. (Original) The vehicle of claim 41 further comprising an active matrix circuit between said transparent substrates.

43-44. (Canceled)

45. (Currently Amended) A vehicle comprising:

a front glass;

a pair of transparent substrates comprising a tempered glass provided over said front glass, each of said transparent substrates having a curved surface; and

a pixel thin film transistor provided over one of said transparent substrates and comprising a source region and a drain region and a channel formation region and a gate electrode, said channel formation region provided between said source region and said drain region, said gate electrode provided adjacent to said channel formation region with a gate insulating film therebetween,

wherein at least said channel formation region contains hydrogen and halogen atoms at a density of 1×10^{15} to 1×10^{20} atoms cm^{-3} or lower, and contains carbon and nitrogen atoms at a density of 1×10^{16} to 5×10^{18} atoms cm^{-3} or lower, and contains oxygen atoms at a density of 1×10^{17} to 5×10^{19} atoms cm^{-3} or lower.

46. (Original) The vehicle of claim 45 further comprising an active matrix circuit between said transparent substrates.

47-48. (Canceled)

49. (Currently Amended) An airplane comprising:

a front glass;

a pair of transparent substrates comprising a resin provided over said front glass, each of said transparent substrates having a curved surface; and

a pixel thin film transistor provided over one of said transparent substrates and comprising a source region and a drain region and a channel formation region and a gate electrode, said channel formation region provided between said source region and said drain region, said gate electrode provided adjacent to said channel formation region with a gate insulating film therebetween,

wherein at least said channel formation region contains hydrogen and halogen atoms at a density of 1×10^{15} to 1×10^{20} atoms cm^{-3} or lower, and contains carbon and nitrogen atoms at a density of 1×10^{16} to 5×10^{18} atoms cm^{-3} or lower, and contains oxygen atoms at a density of 1×10^{17} to 5×10^{19} atoms cm^{-3} or lower.

50. (Original) The airplane of claim 49 further comprising an active matrix circuit between said transparent substrates.

51-52. (Canceled)

53. (Currently Amended) An airplane comprising:

a front glass;

a pair of transparent substrates comprising a tempered glass provided over said front glass, each of said transparent substrates having a curved surface; and

a pixel thin film transistor provided over one of said transparent substrates and comprising a source region and a drain region and a channel formation region and a gate electrode, said channel formation region provided between said source region and said drain region, said gate electrode provided adjacent to said channel formation region with a gate insulating film therebetween,

wherein at least said channel formation region contains hydrogen and halogen atoms at a density of 1×10^{15} to 1×10^{20} atoms cm^{-3} or lower, and contains carbon and nitrogen atoms at a density of 1×10^{16} to 5×10^{18} atoms cm^{-3} or lower, and contains oxygen atoms at a density of 1×10^{17} to 5×10^{19} atoms cm^{-3} or lower.

54. (Original) The airplane of claim 53 further comprising an active matrix circuit between said transparent substrates.

55-56. (Canceled)

57-63. (Cancelled)

64. (Original) The unit of claim 1 wherein information is displayed on said shield

65. (Original) The unit of claim 7 wherein information is displayed on said shield.

66. (Original) The unit of claim 13 wherein information is displayed on said front glass.

67. (Original) The unit of claim 17 wherein information is displayed on said front glass.

68. (Original) The unit of claim 21 wherein information is displayed on said front glass.

69. (Original) The unit of claim 25 wherein information is displayed on said front glass.

70. (Original) The helmet of claim 29 wherein information is displayed on said shield.

71. (Original) The helmet of claim 35 wherein information is displayed on said shield.

72. (Original) The vehicle of claim 41 wherein information is displayed on said front glass.

73. (Original) The vehicle of claim 45 wherein information is displayed on said front glass.

74. (Original) The airplane of claim 49 wherein information is displayed on said front glass.

75. (Original) The airplane of claim 53 wherein information is displayed on said front glass.

76. (Original) The unit of claim 1 wherein said display unit comprises a liquid-crystal display.

77. (Original) The unit of claim 1 wherein said display unit comprises an EL display.

78. (Original) The unit of claim 7 wherein said display unit comprises a liquid-crystal display.

79. (Original) The unit of claim 7 wherein said display unit comprises an EL display.

80. (Original) The unit of claim 13 wherein said display unit comprises a liquid-crystal display.

81. (Original) The unit of claim 13 wherein said display unit comprises an EL display.

82. (Original) The unit of claim 17 wherein said display unit comprises a liquid-crystal display.

83. (Original) The unit of claim 17 wherein said display unit comprises an EL display.

84. (Original) The unit of claim 21 wherein said display unit comprises a liquid-crystal display.

85. (Original) The unit of claim 21 wherein said display unit comprises an EL display.

86. (Original) The unit of claim 25 wherein said display unit comprises a liquid-crystal display.

87. (Original) The unit of claim 25 wherein said display unit comprises an EL display.

88. (New) The unit of claim 1 wherein said density of said hydrogen atoms is higher than 1×10^{15} atoms cm^{-3} , said density of said carbon and nitrogen atoms is higher than 1×10^{16} atoms cm^{-3} , and said density of said oxygen atoms is higher than 1×10^{17} atoms cm^{-3} .

89. (New) The unit of claim 7 wherein said density of said hydrogen atoms is higher than 1×10^{15} atoms cm^{-3} , said density of said carbon and nitrogen atoms is higher than 1×10^{16} atoms cm^{-3} , and said density of said oxygen atoms is higher than 1×10^{17} atoms cm^{-3} .

90. (New) The unit of claim 13 wherein said density of said hydrogen atoms is higher than 1×10^{15} atoms cm^{-3} , said density of said carbon and nitrogen atoms is higher than 1×10^{16} atoms cm^{-3} , and said density of said oxygen atoms is higher than 1×10^{17} atoms cm^{-3} .

91. (New) The unit of claim 17 wherein said density of said hydrogen atoms is higher than 1×10^{15} atoms cm^{-3} , said density of said carbon and nitrogen atoms is higher than 1×10^{16} atoms cm^{-3} , and said density of said oxygen atoms is higher than 1×10^{17} atoms cm^{-3} .

92. (New) The unit of claim 21 wherein said density of said hydrogen atoms is higher than 1×10^{15} atoms cm^{-3} , said density of said carbon and nitrogen atoms is higher than 1×10^{16} atoms cm^{-3} , and said density of said oxygen atoms is higher than 1×10^{17} atoms cm^{-3} .

93. (New) The unit of claim 25 wherein said density of said hydrogen atoms is higher than 1×10^{15} atoms cm^{-3} , said density of said carbon and nitrogen atoms is higher than 1×10^{16} atoms cm^{-3} , and said density of said oxygen atoms is higher than 1×10^{17} atoms cm^{-3} .

94. (New) The helmet of claim 29 wherein said density of said hydrogen and halogen atoms is higher than 1×10^{15} atoms cm^{-3} , and density of said carbon and nitrogen atoms is higher than 1×10^{16} atoms cm^{-3} , and said density of said oxygen atoms is higher than 1×10^{17} atoms cm^{-3} .

95. (New) The helmet of claim 35 wherein said density of said hydrogen and halogen atoms is higher than 1×10^{15} atoms cm^{-3} , said density of said carbon and nitrogen atoms is higher than 1×10^{16} atoms cm^{-3} , and said density of said oxygen atoms is higher than 1×10^{17} atoms cm^{-3} .

96. (New) The vehicle of claim 41 wherein said density of said hydrogen and halogen atoms is higher than 1×10^{15} atoms cm^{-3} , said density of said carbon and nitrogen atoms is higher than 1×10^{16} atoms cm^{-3} , and said density of said oxygen atoms is higher than 1×10^{17} atoms cm^{-3} .

97. (New) The vehicle of claim 45 wherein said density of said hydrogen and halogen atoms is higher than 1×10^{15} atoms cm^{-3} , said density of said carbon and nitrogen atoms is higher than 1×10^{16} atoms cm^{-3} , and said density of said oxygen atoms is higher than 1×10^{17} atoms cm^{-3} .

98. (New) The airplane of claim 49 wherein said density of said hydrogen and halogen atoms is higher than 1×10^{15} atoms cm^{-3} , said density of said carbon and nitrogen atoms is higher than 1×10^{16} atoms cm^{-3} , and said density of said oxygen atoms is higher than 1×10^{17} atoms cm^{-3} .

99. (New) The airplane of claim 53 wherein said density of said hydrogen and halogen atoms is higher than 1×10^{15} atoms cm^{-3} , said density of said carbon and nitrogen atoms is higher

than 1×10^{16} atoms cm^{-3} , and said density of said oxygen atoms is higher than 1×10^{17} atoms cm^{-3} .